United States Department of Agriculture
National Agricultural Statistics Service

Delta Region Quarterly Bee Colony Loss

Released: August 4, 2020

Delta Regional Office (serving Arkansas, Louisiana, and Mississippi)
10800 Financial Centre Parkway, Suite 110, Little Rock, Arkansas 72211
(501) 228-9926 · (855) 270-2705 FAX · www.nass.usda.gov
Cooperating with the University of Arkansas – Division of Agriculture, Louisiana Department of Agriculture and Forestry, and Mississippi Department of Agriculture and Commerce

This report contains the results from the **Quarterly Colony Loss Survey**. These data are also posted on our web site at *https://www.nass.usda.gov/ar* and in a more detailed report at *https://www.nass.usda.gov*. Thanks to all who responded to this survey.

January 1, 2020 Honey Bee Colonies Down 16 Percent for Operations with Five or More Colonies

Honey bee colonies for operations with five or more colonies in the Delta Region on January 1, 2020 totaled 86,500 colonies, down 16 percent from 103,000 colonies on January 1, 2019. On April 1, 2020, honey bee operations in the Delta Region totaled 104,000 colonies.

Honey bee colonies lost for operations with five or more colonies from January through March 2020 was 11,000 colonies, or 12 percent, in the Delta Region. The number of colonies lost during the quarter of April through June 2020 was 6,700 colonies, or 6 percent.

Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – Delta Region and United States: January 1, 2020, April 1, 2020, January-March 2020, and April-June 2020

State	January 1 colonies	January-March					
		Maximum colonies [1]	Lost colonies	Percent lost [2]	Added colonies	Renovated colonies [3]	Percent renovated [4]
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Arkansas	16,500	17,500	1,200	7	700	30	(Z)
Louisiana	44,000	48,000	4,800	10	9,000	20,000	42
Mississippi	26,000	28,000	5,000	18	16,000	660	2
United States	2,876,100	(X)	399,570	14	477,200	153,390	5

State	April 1 colonies	April-June					
		Maximum colonies [1]	Lost colonies	Percent lost [2]	Added colonies	Renovated colonies [3]	Percent renovated [4]
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Arkansas	17,000	17,000	1,900	11	5,000	800	5
Louisiana	53,000	53,000	1,800	3	2,200	4,700	9
Mississippi	34,000	37,000	3,000	8	3,700	570	2
United States	2,982,900	(X)	252,630	8	596,860	632,680	21

(X)Not applicable.
(Z) Less than half of the unit shown.
[1] Number of colonies on the first day of the quarter plus all colonies moved into that state during the quarter.
[2] Percent lost is the number of lost colonies divided by maximum colonies except for the United States, where percent lost is the number of lost colonies divided by the number of colonies on the first day of the quarter.
[3] Defined as any surviving colony that was requeened or received new honey bees through nuc or package.
[4] Percent renovated is the number of renovated colonies divided by maximum colonies except for the United States, where percent renovated is the number of renovated colonies divided by the number of colonies on the first day of the quarter.

Special Note: Data collection for July 2019 quarterly honey bee colonies was suspended.

Varroa Mites Top Colony Stressor in 2019

In Arkansas, the quarter of July through September 2019 had the highest percentage of colonies reported to be affected by varroa mites in 2019 at 53.2 percent. The percent of colonies reported to be affected by varroa mites during January through March 2020 and April through June 2020 were 31.7 percent and 40.5 percent, respectively.

In 2019, Louisiana had the highest percentage of colonies reported to be affected by varroa mites during July through September 2019 with 67.1 percent. The percent of colonies reported to be affected by varroa mites during January through March 2020 and April through June 2020 were 26.5 percent and 23.7 percent, respectively.

In Mississippi, the highest percentage of colonies reported to be affected by varroa mites in 2019 was the quarter of July through September 2019 at 59.1 percent. The percent of colonies reported to be affected by varroa mites during January through March 2020 and April through June 2020 were 58.6 percent and 51.2 percent, respectively.

Colony Health Stressors with Five or More Colonies – Delta Region: January-March 2019, July-September 2019, October-December 2019, January-March 2020, and April-June 2020

State	Varroa mites	Other pests and parasites [1]	Diseases [2]	Pesticides	Other [3]	Unknown
	January-March 2019					
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	19.5	1.5	3.3	55.3	0.7	2.9
Louisiana	57.8	1.3	0.1	0.3	1.0	0.7
Mississippi	14.6	71.0	64.8	48.4	1.9	5.5
	July-September 2019					
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	53.2	19.7	6.8	50.5	6.9	39.3
Louisiana	67.1	66.8	0.4	57.0	2.5	2.7
Mississippi	59.1	45.6	2.4	25.4	4.0	5.1
	October-December 2019					
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	47.7	39.7	1.4	7.8	12.5	32.8
Louisiana	33.0	18.5	3.5	0.7	6.1	0.9
Mississippi	41.0	38.0	4.1	13.9	10.5	5.2
	January-March 2020					
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	31.7	22.7	0.2	2.6	0.4	11.2
Louisiana	26.5	7.0	0.7	1.2	1.4	0.6
Mississippi	58.6	50.9	0.3	1.8	14.5	3.6
	April-June 2020					
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	40.5	15.3	5.1	24.6	2.1	12.4
Louisiana	23.7	4.7	0.5	0.1	3.5	1.3
Mississippi	51.2	36.8	-	0.9	8.4	0.2

- Represents zero.
[1] Tracheal mites, nosema, hive beetle, wax moths, etc.
[2] Includes American and European foulbrood, chalkbrood, stonebrood, paralysis (acute and chronic), kashmir, deformed wing, sacbrood, IAPV, Lake Sinai II, etc.
[3] Includes weather, starvation, insufficient forage, queen failure, hive damage/destroyed, etc.